

STANISLAW ADAM ŚLIPIŃSKI

Institute of Zoology, Polish Academy of Sciences *

STUDIES ON THE COLYDIIDAE (COLEOPTERA,
TENEBRIONOIDEA) OF NEW GUINEA.
PART I. GENERA: *COLOBICONES* GROUV., *HYSTRICONES*
SHARP AND *LASCONOTUS* ERICHSON

This is the first part of proposed studies of New Guinean Colydiidae with intention to cover all species of this family, which is very poorly known. The detailed description of the particular genera with key to Papuan genera will be provided in a special part of this study.

The following acronyms are used for repositories of specimens:

MSNG: Museo Civico di Storia Naturale, « Giacomo Doria », Genova, Italy (Dr. Roberto Poggi),

MHNG: Muséum d'Histoire Naturelle, Genève, Switzerland (Dr. Ivan Löbl),

TMB: Termesztudományi Múzeum, Budapest, Hungary (Dr. Zoltan Kaszab),

ZMB: Zoologisches Museum an der Humboldt-Univ., Berlin, German Democratic Republic (Dr. Manfred Uhlig),

IZPAN: Institute of Zoology, Warsaw, Poland.

I would like to express my sincere thanks to above mentioned curators and their institutions for loan of the material for this study.

Colobicones Grouvelle

Colobicones Grouvelle, 1918: 15. Type species by monotypy: *Colobicones singularis* Grouvelle (Seychelles Isl.).

Wittmeria Dajoz, 1975: 294. (Nepal)

* Wilcza 64, 00-679 Warszawa, Poland

Colobicones lechi sp. n.

Named after my dear friend Dr. Lech Borowiec, a well known specialist of Bruchidae and Chrysomelidae of Wroclaw University, Poland.

Body elongate-oval, moderately convex, shortly and sparsely setose, colour brown, surface feebly shiny.

Head densely and coarsely tuberculate, tubercles flat, rounded, variable in size and separation, usually less than 0.5 diameter apart; sides of frons near eyes slightly raised, punctured; eyes large, twice as long as temples, not prominent; temples short and obtusely acute apically; antenna 10-segmented (fig. 1).

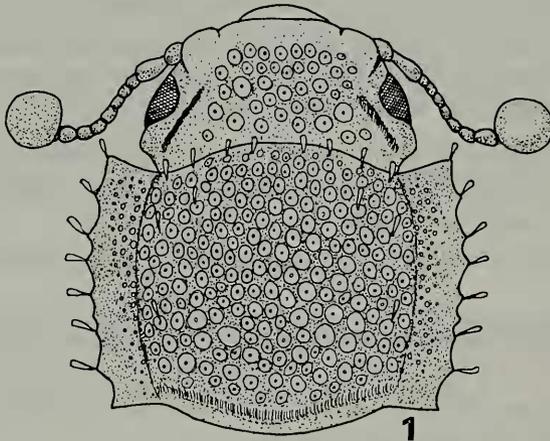


Fig. 1 - *Colobicones lechi* sp. n., head and pronotum

Pronotum transverse (20:24), slightly convex medially with widely explanate sides; anterior margin arcuate, scarcely sinuate before acute and prominent anterior angles; side margins finely denticulate, each denticle with squamiform seta, similar setae are distributed along anterior margin and lateral parts of pronotal disk; pronotal base arcuately prominent medially, scarcely sinuate laterally, not clearly bordered; hind angles acute, prominent; disk coarsely and densely tuberculate, tubercles as large or a little larger than those on head, nearly contiguous.

Scutellum rounded, glabrous, very small.

Elytra slightly longer than wide (42:30) and twice as long as pronotum (42:20), subparallel, widest slightly behind middle, with regular rows of punctures, strial punctures large, separated longitudinally by 0.5 diameter, somewhat transverse; alternate intervals with rows of sparsely situated, erected setae similar to those of pronotal sides; comparative length of setae to eye diameter as 2.9:4.1.

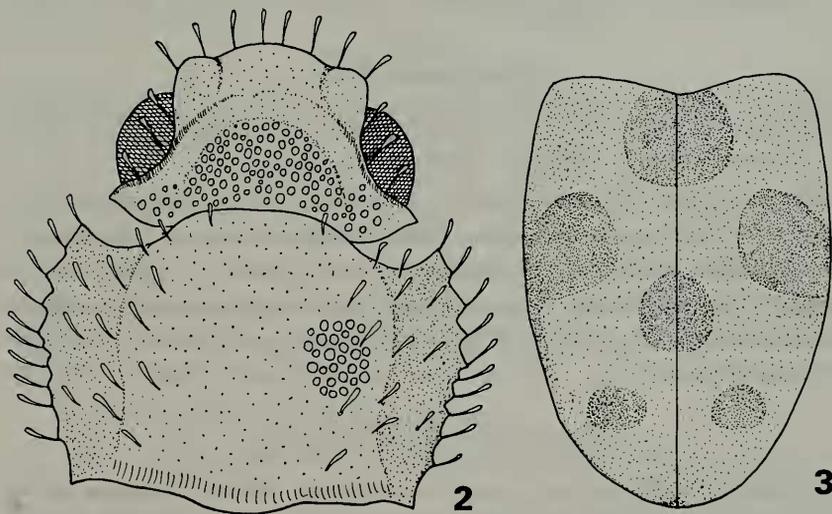
Length 1.5-1.7 mm.

Holotype: « New Guinea (NE) Wau, Golden Ridge, 3.IX.1968, No. NG-W-B. 68, leg. Dr. J. Balogh » (TMB, Budapest).

Paratypes: « N. Guinea, Dilo, VI-VII/18/90, Loria » (1, MSNG; 1, IZPAN); « N. Guinea, S.E. M.ti Astrolabe, II/18/93. Loria » (1, MSNG); « N. Guinea, Friedrich-Wilhelm-Hafen, 1901, leg. Biró » (1, TMB).

Colobicones maculatus sp. n.

Body dark brown, eyes and maculate pattern on elytra black, legs and antennae brown. Body surface entirely reticulate, feebly shiny. Pubescence moderately long, setae on pronotal sides and those of elytra as long as half eye diameter (3.2:7), setae comparatively longer and slender than those of *C. lechi* sp. n.



Figs 2, 3 - *C. maculatus* sp. n., 2: head and pronotum; 3: outline and pattern of elytra.

Head transverse, eyes large, prominent and rounded, finely reticulate; temple short prominent and acute, relation eye length: temple as 7:1.2, sides of frons and vertex slightly upturned, disk of frons convex, surface finely granulose, granules smaller and sparser than those of *C. lechi*, 0.5-1 diameter apart; sides of head near eyes and at anterior margin with long erected setae.

Pronotum transverse (20:26) widest at anterior third, more strongly narrowing basally than anteriorly; lateral sides widely explanate, margins denticulate, each denticle with erected seta (fig. 2); anterior angles prominent, acute, posterior ones nearly rectangular, acute; pronotal base not distinctly bordered. Disk tuberculate like on head, tubercles 1 diameter apart, reticulate.

Scutellum rounded, black, glabrous.

Elytra longer than wide (41:30) and twice as long as pronotum with dark maculate pattern as on fig. 3; stria punctures deep, more rounded, separated longitudinally by 0.5 diameter, even intervals narrow, 0.3 diameter of stria punctures, alternate intervals setose like in *lechi*.

Length 1.7 mm.

Holotype: « D. N. Guinea, am Maifluss 63, Kaiserin Augustatl. Exped. V./1/912, Ledermann S.G. » (ZMB, Berlin).

Paratype: « N. Guinea, Erima, Astrolabe B./18/96, Biró » (TMB).

Hystricones Sharp

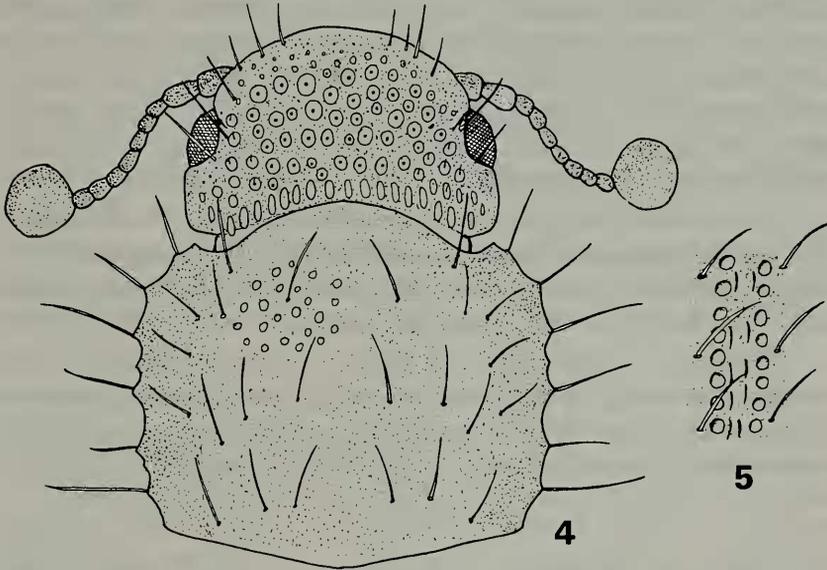
Hystricones Sharp, 1894: 453. Type-species, by monotypy: *Hystricones armatus* Sharp (Mexico, Guatemala).

This genus is very similar to *Colobicones* Grouvelle by shortoval body, denticulate pronotal sides, 10-segmented antennae with compact, one-segmented club, and reduced antennal grooves on underside of head. Unlike *Colobicones* there are double setae on elytral surface (fig. 4) in *Hystricones*. Also body of *Hystricones* is more convex and comparatively shorter.

Hystricones hirtus sp. n.

Body elongate-oval, convex, moderately densely clothed above with long, erect yellowish setae, dorsal surface brown, only elytra along suture and with transverse median band black.

Head densely and coarsely tuberculate, tubercles large and rounded medially, more elongate and smaller on vertex and frontal sides, size and separation variable; eyes small, slightly prominent, temple a little longer than eye diameter, obtusely rounded apically; antenna: fig. 4; long setae, much longer than eye diameter situated near eyes margins and at anterior margin of head.



Figs 4, 5 - *Hystricones hirtus* sp. n. 4: head and pronotum; 5: sculpture of elytra.

Pronotum slightly transverse (23:28), anterior margin arcuately prominent medially, deeply sinuate near angles which are shortly prominent and acute, posterior angles obtusely acute; lateral sides narrowly explanate, margins denticulate, each denticle with long acute apically seta, similar setae distributed on pronotal surface; surface tuberculate, tubercles smaller than those of head, usually one diameter apart.

Scutellum small, transverse, glabrous.

Elytra longer than wide (51:40) and twice as long as pronotum, widest behind middle, rounded apically; setae on alternate intervals long and erected, along even intervals with two rows of fine, recumbent setae (fig. 5).

Length 2.2 mm.

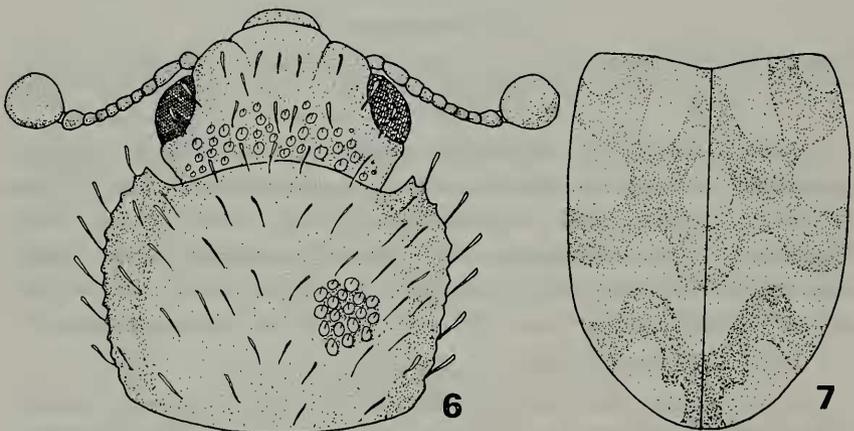
Holotype: « New Guinea (N.E.), Wau, Mt. Kaindi, No. NGW-B. 72, 19-24. VIII.1969, leg. Dr. J. Balogh » (TMB, Budapest).

Hystricones papuanus sp. n.

Median part of head, pronotum, legs and antennae brown, sides of head, explanate margins of pronotum and pattern of elytra brighter than body colour, background of elytra and eyes black. Pubescence of prothorax and elytra duplex, sparse erected setae and yellowish shorter and appressed ones more denser than preceding form; erected setae of dorsal side yellow and black, usually darker on dark parts of body and yellowish ones on brown parts.

Head: anterior clypeal margin rounded; eyes large, convex, finely faceted; temples short, rounded, ratio length of eye: temple as 4:1.7; surface granulose, granules larger than facets, 0.5-0.8 diameters apart, separation variable, spaces reticulate; antenna as on fig. 6.

Pronotum transverse (16:23), widest at anterior one-third, more strongly narrowing basally than anteriorly; anterior angles prominent acute, posterior ones obtusely rounded; lateral sides narrowly-explanate, margins finely denticulate, setose, length of setae: length of eye as 3.2:4.



Figs. 6, 7 - *H. papuanus* sp. n., 6: head and pronotum; 7: outline and pattern of elytra.

Scutellum rounded, glabrous.

Elytra longer than wide (35:28) and twice as long as pronotum, with colour pattern as on fig. 7; alternate intervals with row of sparse erected setae of black and yellow colours in similar proportions, all intervals along rows of punctures with rows of appressed brighter setae.

Length 1.3 mm.

Holotype: « N. Guinea, E. E., Moroka, 1300 m, VII-IX./18/93, Loria » (MSNG, Genova),

Paratype: same data as holotype (IZPAN).

Lasconotus Erichson

Lasconotus Erichson, 1845, Naturg. Ins. Deutschl., Coleoptera, (1) 3, p. 258 nota. Type species: *Lasconotus complex* Leconte.

This genus is well characterized by pronotum and elytra with more or less prominent carinae, 3-segmented antennal club and reduced antennal grooves on lower margin of eyes.

Lasconotus cavicollis sp. n.

Body elongate, subcylindrical, brown.

Head: anterior clypeal margin rounded; sides of vertex near eyes raised to a form of supraorbital carinae; temples absent; vertex with median prominent tubercle, surface granulose, granules flat, larger than facets of eyes, separation variable 0.2-1.2 diameters apart, spaces finely reticulate, feebly shiny.

Pronotum longer than wide (23:20), widest at anterior third, feebly narrowing basally and anteriorly; anterior angles slightly prominent, acute, posterior ones rectangular; lateral sides entirely-bordered, margins crenulate; pronotal disk convex with four entire carinae, admedian carinae not clearly defined basally, denticulate and bordering deep median cavity (fig. 8); spaces between carinae tuberculate, tubercles round or transverse.

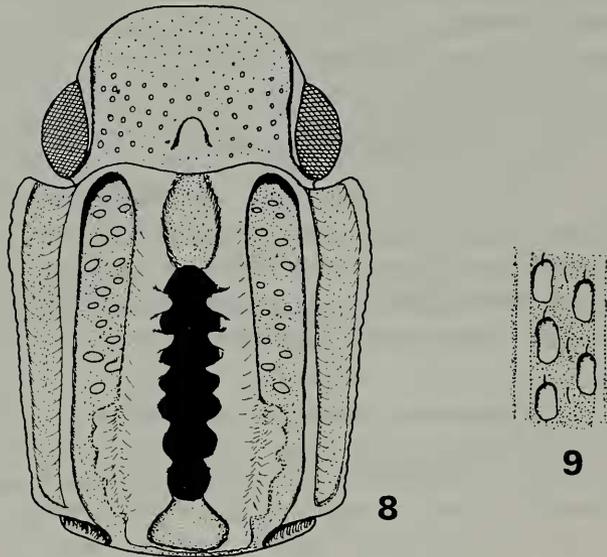
Scutellum rounded, glabrous.

Elytra 2.1 times longer than wide and twice as long as pronotum, parallelsided, together rounded apically; scutellary striole consists of 4 punctures; alternate intervals, especially 3rd and 5th costulate; striae punctures and setae as on fig. 9.

Length 1.8 mm.

Holotype: « N. Guinea, S.E., M.ti Astrolabe, II./18/93. Loria » (MSNG, Genova).

Paratype: « D. N. Guinea, Kais. Augustatl. Exp., /18/98, 12.VII, S. G. Burgers » (ZMB).



Figs 8, 9 - *Lasconotus cavicollis* sp. n., 8: head and pronotum; 9: punctures of elytra.

Lasconotus polonicus sp. n.

Body elongate, subcylindrical, brown, shiny.

Head transverse, anterior clypeal margin nearly straight, sides of frons and vertex upturned to a form of supraorbital carinae; eyes large, coarsely faceted; temples absent; surface sparsely tuberculate, tubercles as large as facets of eyes, usually one diameter apart; vertex at basal part convex with not clearly visible median tubercle; antenna: fig. 10.

Pronotum scarcely longer than wide (30:28), widest at middle but nearly parallelsided; sides narrowly explanate, margins crenulate; anterior margin sinuate medially and laterally before angles; anterior

angles prominent, acute, posterior ones obtusely rounded; pronotal disk with deep, dentate laterally median elongate groove, and four carinae, sublateral carinae strongly elevated anteriorly and connected along anterior margin of pronotum (fig. 10), admedian carine not well defined, and clearly separated from anterior margin.

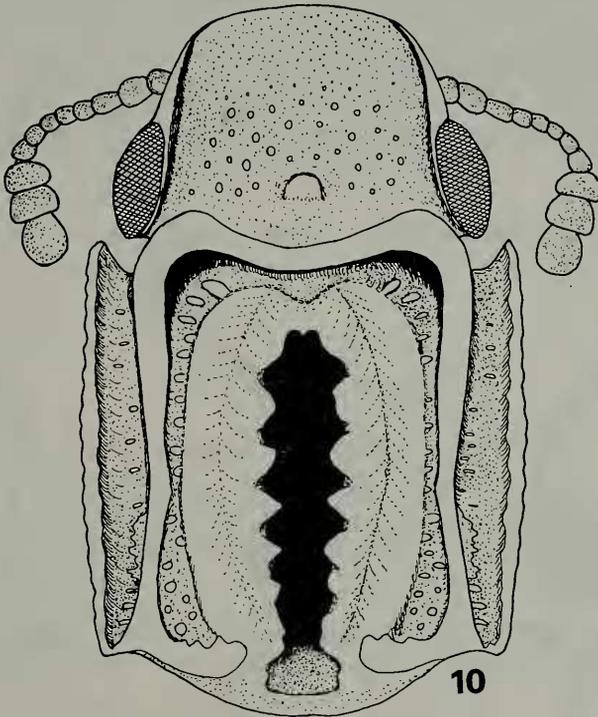


Fig. 10 - *Lasconotus polonicus* sp. n., head and pronotum.

Elytra 2.1 times longer than wide, and 1.9 times as long as pronotum, subcylindrical, rounded apically; alternate intervals costulate through their entire length, strial punctures as in *cavicollis*.

Length 2.1-2.4 mm.

Holotype: «Papua New Guinea, E.H. Prov. Umg. Kainantu, Operunka, XI./19/79, W.G. Ulrich » (MHNG, Genève).

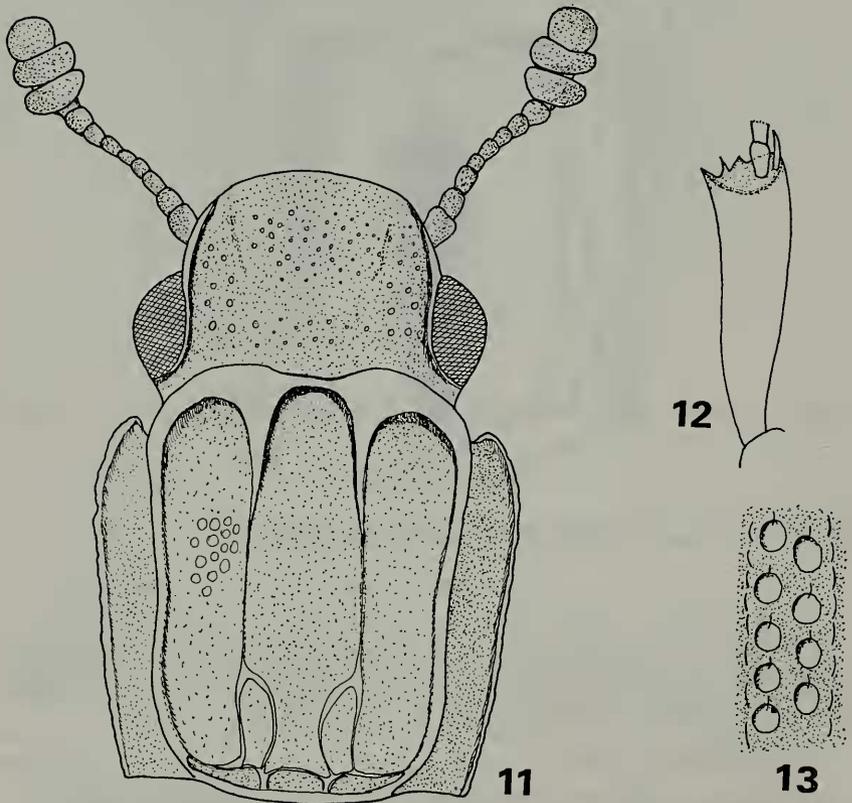
Paratype: same data as holotype (IZPAN).

Lasconotus papuanus sp. n.

Body elongate, narrowly-subcylindrical, reddish-brown.

Head transverse with large, convex eyes and reduced not traceable temples; supraorbital carinae near eyes feebly visible; anterior clypeal margin straight, surface sparsely punctured, reticulate; frons and vertex punctured, each puncture with short recumbent yellow seta; antenna: fig. 11.

Pronotum slightly longer than wide (25:23), widest at anterior one-third then more strongly narrowing basally than anteriorly; anterior angles prominent and acute, posterior ones rectangular; sides



Figs 11, 12, 13 - *L. papuanus* sp. n., 11: head and pronotum; 12: protibia; 13: punctures of elytra.

narrowly explanate, margins finely crenulate; disk with four entire carinae (fig. 11), surface between carinae finely tuberculate, tubercles round, 0.5 diameter apart, each with an apical point and recumbent seta; spaces reticulate.

Scutellum rounded, glabrous.

Elytra twice as long as wide and 2.1 as long as pronotum, parallel-sides, subcylindrical, rounded apically; striae punctures round, a little larger than pronotal tubercles, separated longitudinally by 0.5 diameter; alternate intervals convex, basally costulate, wider than even ones, with rows of minute setae (fig. 13).

Protibia with distinct apical spine (fig. 12).

Length 2.1 mm.

Holotype: « Papua New Guinea, VI./19/79, Madang. Umg. Madang, W. G. Ulrich » (MHNG, Genève).

KEYS TO THE SPECIES

a) Key to the World *Colobicones* Grouvelle

1. Elytra with dark pattern, bicoloured; temples very short and prominently acute (fig. 2); head and pronotum granulate, granules only scarcely larger than facets of eyes. New Guinea. . . .
 *maculatus* sp. n.
- Elytra uniformly brown; temples comparatively longer rounded or obtusely acute; head and pronotum tuberculate, tubercles large, flat-topped 2
2. Temple much longer than eye diameter (temple length: eye diameter = 3:2). Seychelles and Mascarene Isl. . . . *singularis* Grouvelle
- Temples shorter than eyes diameter (2:3) 3
3. Temples obtusely rounded behind eyes; head nearly parallelsided at basal two-thirds; erected setae on pronotum and elytra not widened apically; striae punctures on elytra round. Nepal . . .
 *pubescens* (Dajoz)
- Temples slightly acute apically, comparatively shorter; head narrowing anteriorly; erected setae of pronotum and elytra distinctly widened apically; striae punctures of elytra transverse. New Guinea *lechi* sp. n.

b) Key to the World *Hystricones* Sharp

1. Dorsal erected setae very long and acute apically. New Guinea.
..... *hirtus* sp. n.
- Dorsal erected setae shorter and squamiform, widened apically
then rounded 2
2. Pronotum abruptly emarginate at basal one-third, surface
punctured; legs with densely situated squamiform setae on fe-
mora and tibiae. Mexico, Guatemala *armatus* Sharp
- Pronotum gradually narrowing basally, surface granulose; legs
shortly pubescent, setae not squamiform 3
3. Pronotum widest shortly behind middle; elytral bases only
slightly wider than pronotal base. Samoa Ins. Length 2 mm.
..... *vagans* Arrow
- Pronotum widest at anterior one-third, then more strongly nar-
rowing basally than anteriorly; elytral bases much wider than
base of pronotum. New Guinea *papuanus* sp. n.

c) Key to the New Guinean *Lasconotus* Erichson.

1. Pronotum without median cavity *papuanus* sp. n.
- Pronotum with median cavity 2
2. Anterior margin of pronotum strongly elevated (fig. 10); ad-
median carinae of pronotum separated from anterior margin by
a transverse groove *polonicus* sp. n.
- Anterior margin of pronotum not elevated, admedian carinae
reaching anterior margin (fig. 8) *cavicollis* sp. n.

REFERENCES

- DAJOZ R., 1975 - Fam. Colydiidae et Cerylonidae. In: Ergebnisse der Bhutan Expedition 1972 des Naturhistorischen Museums in Basel - *Ent. Basiliensia*, 1: 293-312.
- GROUVELLE A., 1918 - Coleoptera of the families Ostomidae... from the Seychelles and Aldabra Islands - *Trans. Ent. Soc., London*, 1-57, pls. I, II.
- SHARP D., 1894 - Colydiidae. In: F. Godman and O. Salvin (eds.) *Biologia Centrali Americana, Insecta, Coleoptera* - 2: 443-488.

SUMMARY

The New Guinean members of the genera *Colobicones* Grouvelle, *Hystricones* Sharp and *Lasconotus* Erichson are reviewed and figured. New species: *Colobicones*

maculatus, *C. lechi*, *Hystricones hirtus*, *H. papuanus*, *Lasconotus polonicus*, *L. cavicollis* and *L. papuanus* are described. All these above mentioned genera are reported from New Guinea for the first time. Keys are provided for the World species of *Colobicones* and *Hystricones* and for Papuan *Lasconotus*.

RIASSUNTO

Sono sottoposte a revisione e figurate le specie della Nuova Guinea riferibili ai generi *Colobicones* Grouv., *Hystricones* Sharp e *Lasconotus* Erich. i quali sono citati per la prima volta di questa zona. Sono descritte le seguenti specie nuove: *Colobicones maculatus*, *C. lechi*, *Hystricones hirtus*, *H. papuanus*, *Lasconotus polonicus*, *L. cavicollis* e *L. papuanus*. Vengono infine fornite le tabelle per l'identificazione delle specie mondiali dei generi *Colobicones* e *Hystricones* e delle specie papuane del genere *Lasconotus*.
